



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Richard G. Hoffman II  
Appln. Serial No.: 10/696,809  
Filing Date: October 30, 2003  
Art Unit: 3662  
Confirmation No.: 1299  
Examiner: Isam A. Alsomiri  
Title: METHOD AND APPARATUS FOR DETECTING A  
MOVING PROJECTILE

**Mail Stop - AF**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Dear Sir:

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

The following Pre-Appeal Brief Request for Review ("Request") is being filed in accordance with the provisions set forth in the Official Gazette Notice of July 12, 2005 ("OG Notice"). Pursuant to the OG Notice, this Request is being filed concurrently with a Notice of Appeal. Applicant respectfully requests reconsideration of the Application in light of the remarks set forth below.

### REMARKS

Applicant contends that the rejection of Claims 1-25 on prior art grounds contains clear legal and factual deficiencies, as described below. In a Final Office Action dated September 12, 2005, Claims 1-25 were rejected as being unpatentable over U.S. Patent No. 6,057,915 to Squire ("*Squire*") in view of GB 2 219 708 to Sepp ("*Sepp*"), and in some instances additional references for certain dependent claims. Applicant requests a finding that these rejections are improper and allowance of these claims.

With respect to Claim 1, the Final Office Action contends that *Sepp* discloses "analyzing information in said received energy so as to detect the presence of a previously undetected moving projectile." Applicant contends that *Sepp* does not disclose this limitation for the reasons described in Applicant's Response dated November 14, 2005 at Page 5. In short, Applicant contends that *Sepp* involves using a laser sensor to determine the velocity and range of a target previously detected by a thermal imaging apparatus, but not detecting the presence of the target in the first instance by laser. This position is described more fully at Page 5 of Applicant's November 14 Response.<sup>1</sup>

The Advisory Action mailed December 5, 2005 addressed such remarks stating:

Applicant argues that *Sepp* does not disclose detecting the presence of a previously undetected moving projectile. However, as mentioned in the office action *Sepp* teaches two steps for detecting a projectile, first a thermal imaging is used to narrow the field of view and create hot spots (real and spurious objects), in this mode the targets have not yet been determined, which reads "previously undetected", then a laser-heterodyne sensor is used to detecting the presence of a previously undetected moving projectiles by detecting Doppler shift in the reflected signals (see page j -6 and figure 1), in this mode the real and spurious targets are detected and determined which reads on the claimed "detecting the presence of a previously undetected moving projectile". Therefore, the rejections are maintained. Applicant should file and RCE with and amendment to the claims to clearly define the scope of the invention.

Thus, the Advisory Action contends that particles that are detected in *Sepp* using a thermal imaging system are "previously undetected" because these detected targets include real and

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<sup>1</sup> It is noted in the OG Notice at <http://www.uspto.gov/web/offices/com/sol/og/2005/week28/patbref.htm> that "Applicants are encouraged to refer to arguments already of record rather than repeating them in the request." Accordingly, Applicants refer here to, and summarize, the previous arguments rather than reciting them explicitly.

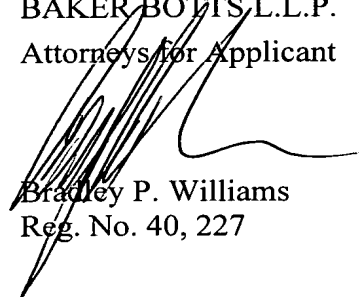
spurious objects, and that they are only later detected for the first time when the velocity of the target is determined based on a Doppler shift. Applicant respectfully submits that this is incorrect for reasons previously referenced on Page 5 of Applicant's November 14 Response.

Further, it appears the Advisory Action is mistakenly equating detection of real and spurious objects with subsequent classification of the previously detected real and spurious objects (as real or spurious based on further analysis utilizing a Doppler shift). Classification of a previously detected object is not detection of a previously undetected object. In contrast, the teachings of certain embodiments of Claim 1 involve detecting the presence of a projectile in the first instance by analyzing reflected energy of a laser beam (*See* Page 7, lines 13-23 of Applicant's Specification, for example), not determining its speed after it has been detected by a conventional thermal imaging system, as is done in *Sepp*. *See Sepp* at Page 5. For these reasons, and the above-referenced reasons described in Applicant's Response dated November 14, 2005 at Page 5, Applicant contends that the rejection of Claim 1 is improper, as is the rejection of Claim 2 through 25 for the same or analogous reasons.

### **CONCLUSION**

As the rejection of Claims 1-25 contains clear deficiencies, Applicant respectfully requests a finding of allowance of Claims 1-25. To the extent necessary, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of BAKER BOTTS L.L.P.

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Date: January 12, 2006

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